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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,551	06/16/2000	Basavaraj B. Patil	P1003	9790

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EXAMINER	
LANIER, BENJAMIN E	
ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/595,551	PATIL ET AL.	
	Examiner	Art Unit	
	Benjamin E Lanier	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. The amendment filed 03 November 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the requirement of functionality is never recited in the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Reissue Applications

2. Applicant's arguments filed 03 November 2005 have been fully considered but they are not persuasive. Applicant's argument that the cited reference does not disclose said registration reply message originating at the home agent network server and transmitted to the mobile node to acknowledge registering the mobile node care-of-address with the home agent network server is not persuasive Calhoun discloses that the registration reply is generated by the home network agent and that the registration reply contains all the keying material to be used by the mobile node (Page 24, forth full paragraph). Applicant's specification defines the care-of-address as an identification of the foreign network. Therefore, the care-of-address is taught by Calhoun on pages 22-23 where Calhoun discloses that the AMR (Mobile Node Request) is generated by the foreign network and then transmitted to the home network for authentication. The home network of Calhoun has an identification of the foreign network being used by the mobile node.

3. Applicant's argument that the claimed broker and the claimed AAA server cannot be met by Calhoun's teaching of a AAA server because they are entirely different entities as used in the

specification and the claims is not persuasive because the claims do not require them to be distinctly separate entities. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, interpreting the AAA server of Calhoun to meet the claimed AAA server and the claimed broker would not make the dependent claim identical in scope to the claims in question because, as Applicant correctly points out on page 18 of the remarks, the claimed AAA server and the claimed broker have different functionality. Therefore, in order to make the claims identical in scope, each element would have to have the exact same functionality.

4. Applicant's arguments with respect to the amended claim limitations of the gateway and firewall have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Calhoun, in view of Caronni, U.S. Patent No. 6,507,908 (previously cited in the Office Action dated 14 March 2004).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-4, 8-14, 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. The added material which is not supported by the original disclosure is as follows: the requirement of functionality is never recited in the specification.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calhoun (IETF – "DIAMETER Mobile IP Extension"), in view of Caronni, U.S. Patent No. 6,507,908. Referring to claim 1, Calhoun discloses a method for Authenticating, Authorization, and Accounting Policy Protocol that is used between two entities for various services wherein a mobile node is allowed to change its point of attachment to the Internet without service disruption (Pages 1-2). The mobile node has a foreign agent and a home agent, with a home server (Page 22, 4.1), wherein the foreign agent and the home agent communicate using a generated key (Page 14, 3.8), which meets the limitation of establishing at least one security association between the home network and the foreign network, wherein the home network has

at least one home agent network server. The home network sever generates a key for use between the foreign agent and the mobile node (Page 12, 3.5 & Page 23, 4.1, last paragraph), which meets the limitation of establishing at least one security association between the mobile node and the foreign network using a registration message to transmit a public key. A key is also generated for use between the mobile node and home agent (Pages 16-17, 3.11), which meets the limitation of requiring that any information packet to be transmitted from the mobile node to the home network be encrypted with an encryption mechanism, transmitting the information packet from the mobile node using the security associations to support secure communications from the mobile node, decoding information from the encrypted information packet at the home network to retrieve the information. Before reaching the home agent the communication packet will be routed through a AAA server (Page 22, 4.1), which meets the limitation of routing the information packet through an AAA server performing authentication and accounting functions. Calhoun discloses that the registration reply is generated by the home network agent and that the registration reply contains all the keying material to be used by the mobile node (Page 24, forth full paragraph). Applicant's specification defines the care-of-address as an identification of the foreign network. Therefore, the care-of-address is taught by Calhoun on pages 22-23 where Calhoun discloses that the AMR (Mobile Node Request) is generated by the foreign network and then transmitted to the home network for authentication. The home network of Calhoun has an identification of the foreign network being used by the mobile node, which meets the limitation of said registration reply message originating at the home agent network server and transmitted to the mobile node to acknowledge registering the mobile node care-of-address with the home agent network server. Calhoun does not disclose that the AAA server contains a firewall.

Caronni discloses a secure communication system for mobile hosts wherein a firewall is in the mobile network (Col. 1, lines 13-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use firewall technology in the AAA server of Calhoun in order to prevent unauthorized access to or from the mobile network as taught by Caronni (Col. 1, lines 28-31).

Referring to claim 11 Calhoun discloses a method for Authenticating, Authorization, and Accounting Policy Protocol that is used between two entities for various services wherein a mobile node is allowed to change its point of attachment to the Internet without service disruption (Pages 1-2). The mobile node has a foreign agent and a home agent, with a home server (Page 22, 4.1), wherein the foreign agent and the home agent communicate using a generated key (Page 14, 3.8), which meets the limitation of establishing at least one security association between the home network and the foreign network, wherein the home network has at least one home agent network server. System communications over the network conform to a specific security protocols (Pages 9-22). The home AAA server oversees the conformity of the secure communication by authenticating registration requests and generating keys (Pages 22-25), which meets the limitation of using a service level agreement broker to establish and maintain security associations. The security associations can be made with multiple foreign networks (Page 20, 3.16), which meets the limitation of a plurality of security associations. The home network sever generates a key for use between the foreign agent and the mobile node (Page 12, 3.5 & Page 23, 4.1, last paragraph), which meets the limitation of establishing at least one security association between the mobile node and the foreign network using a registration message to transmit a public key. A key is also generated for use between the mobile node and

home agent (Pages 16-17, 3.11), which meets the limitation of requiring that any information packet to be transmitted from the mobile node to the home network be encrypted with an encryption mechanism, transmitting the information packet from the mobile node using the security associations to support secure communications from the mobile node, decoding information from the encrypted information packet at the home network to retrieve the information. Before reaching the home agent the communication packet will be routed through a AAA server (Page 22, 4.1), which meets the limitation of routing the information packet through an AAA server performing authentication and accounting functions. Calhoun discloses that the registration reply is generated by the home network agent and that the registration reply contains all the keying material to be used by the mobile node (Page 24, forth full paragraph). Applicant's specification defines the care-of-address as an identification of the foreign network. Therefore, the care-of-address is taught by Calhoun on pages 22-23 where Calhoun discloses that the AMR (Mobile Node Request) is generated by the foreign network and then transmitted to the home network for authentication. The home network of Calhoun has an identification of the foreign network being used by the mobile node, which meets the limitation of said registration reply message originating at the home agent network server and transmitted to the mobile node to acknowledge registering the mobile node care-of-address with the home agent network server. Calhoun does not disclose that the AAA server contains a firewall. Caronni discloses a secure communication system for mobile hosts wherein a firewall is in the mobile network (Col. 1, lines 13-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use firewall technology in the AAA server of Calhoun in order to prevent unauthorized access to or from the mobile network as taught by Caronni (Col. 1, lines 28-31).

Referring to claims 20, 29, Calhoun discloses a method for Authenticating, Authorization, and Accounting Policy Protocol that is used between two entities for various services wherein a mobile node is allowed to change its point of attachment to the Internet without service disruption (Pages 1-2). The network contains a home network having a home agent server coupled to a router capable of directing information packets to and from the home network (page 22, 4.1), and a foreign network having a foreign agent coupled to a router capable of directing information packets to and from the foreign network and a transceiver capable of performing wireless communications with at least one mobile node in the transmission range of the transceiver for the foreign network. The mobile node has a foreign agent and a home agent, with a home server (Page 22, 4.1), wherein the foreign agent and the home agent communicate using a generated key (Page 14, 3.8), which meets the limitation of establishing at least one security association between the home network and the foreign network, wherein the home network has at least one home agent network server. System communications over the network conform to a specific security protocols (Pages 9-22). The home AAA server oversees the conformity of the secure communication by authenticating registration requests and generating keys (Pages 22-25), which meets the limitation of a broker functioning as a consortium of security associations, said broker used to establish security associations. The security associations can be made with multiple foreign networks (Page 20, 3.16), which meets the limitation of a plurality of security associations. The home network sever generates a key for use between the foreign agent and the mobile node (Page 12, 3.5 & Page 23, 4.1, last paragraph), which meets the limitation of establishing at least one security association between the mobile node and the foreign network using a registration message to transmit a public key. Before

reaching the home agent the communication packet will be routed through a AAA server (Page 22, 4.1), which meets the limitation of routing the information packet through an AAA server performing authentication and accounting functions. Calhoun discloses that the registration reply is generated by the home network agent and that the registration reply contains all the keying material to be used by the mobile node (Page 24, forth full paragraph). Applicant's specification defines the care-of-address as an identification of the foreign network. Therefore, the care-of-address is taught by Calhoun on pages 22-23 where Calhoun discloses that the AMR (Mobile Node Request) is generated by the foreign network and then transmitted to the home network for authentication. The home network of Calhoun has an identification of the foreign network being used by the mobile node, which meets the limitation of said registration reply message originating at the home agent network server and transmitted to the mobile node to acknowledge registering the mobile node care-of-address with the home agent network server. Calhoun does not disclose that the AAA server contains a firewall. Caronni discloses a secure communication system for mobile hosts wherein a firewall is in the mobile network (Col. 1, lines 13-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use firewall technology in the AAA server of Calhoun in order to prevent unauthorized access to or from the mobile network as taught by Caronni (Col. 1, lines 28-31).

Referring to claims 3, 13, 22, 31, Calhoun discloses that the foreign agent and the mobile node communicate using a generated key (Page 12, 3.5), which meets the limitation of establishing a security association between the mobile node and a correspondent node.

Referring to claims 2, 4, 12, 14, 21, 23, 30, 32, Calhoun discloses that the foreign agent and the home agent communicate using a generated key (Page 14, 3.8), which meets the

limitation of establishing a security association between the home network and a correspondent node.

Referring to claims 5, 6, 15, 16, 24, 25, 33, 34, Calhoun discloses using public and private key encryption (Page 23, 4.1, last paragraph).

Referring to claims 7, 17, the Diameter system framework described by Calhoun is designed for cellular systems.

Referring to claims 8, 18, 26, 35, Calhoun discloses that security associations can be made with multiple foreign networks (Page 20, 3.16).

Referring to claims 9, 10, 19, 20, 27, 28, 36, 37, Calhoun discloses that system communications over the network conform to a specific security protocols (Pages 9-22), which meets the limitation of a service level agreement to manage the secure communication of information packets on the multiple security associations. The home AAA server oversees the conformity of the secure communication by authenticating registration requests and generating keys (Pages 22-25), which meets the limitation of a broker to assist in the use of service level agreements on the secure communications system. The security associations can be made with multiple foreign networks (Page 20, 3.16), which meets the limitation of said service level agreements including a plurality of networks.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin E. Lanier

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